Volume XXI, THE SCIENCE TEACHER

Index—February through November, 1954

Author's Index

Alfke, Dorothy. *Squeeze Bottle Science.* October: 245.

Anderson, Harold S. *A Key to the Science Interests of Junior High School Students.* October: 227.

Anderson, Kenneth E. *Implications for Teacher Education in Science.* March: 71.

Barish, William. *Grading the Teacher.* September: 182.

Bayles, Ernest E. *Is Modern Science Inductive?* April: 113.

Beachler, Charles A. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 142.

Beck, Charles F. *How to Make a Carbon Microphone Using a Telephone Speaker.* March: 95.

Bingham, N. Eldred and Marjorie Bingham. *The School Assembly as a Science Experience.* March: 81.

Brown, Clyde M. *Reading in Science as a Means of Improving the Junior High School Program.* November: 281.

Brown, Stanley B. *Trends in Science Education—1953.* March: 84.

Buckham, W. Bayard. *Progress in Making Science Real to Everyone.* February: 12.

Buell, Mahlon. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 118.

Burleson, Charles E. *Bring the Sky into the Classroom.* February: 23.

Burnett, R. Will. *Reading and Plugging In—Through Elementary Science.* March: 65.

Chatelier, Paul A. *Hydroponics.* March: 74.

Collette, Alfred T. and Harvey S. Steinberg. *Centigrade-Fahrenheit Conversion Chart . . . A Teacher-Pupil Project.* October: 245.

Fonsworth, Emile C. *The Functional Approach in General Science.* February: 19.

Freeman, P. J. and M. M. Shrewsbury. *Uses of Fresh Anatomical Materials Prepared by Deep Freezing.* February: 31.

Grass, Calvin. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 141.

Hadley, Elbert H. *Leonardo da Vinci—Proponent of the Experimental Method.* October: 217.

Hall, David G. *Recent Developments in Entomology and Their Implications.* October: 224.

Hanawalt, F. A. *Do You Have Ants in Your Plans?* February: 21.

Hasse, M. M. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 180.

Hertzka, Katherine. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 118.

Hollenbeck, Irene. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 140.

Kaempffert, Waldemar. *Can Science Create Life?* November: 265.

King, Jennings. *Thermostat Demonstrator.* March: 93.

Kirk, Raymond E. *Science Teaching and the Laboratory.* October: 238.

Lampkin, Richard H. *A Laboratory Activity in Astronomy.* April: 126.

Larrick, Nancy. *Children's Books Enrich Elementary Science.* October: 231.

Leacy, C. Richard and Robert D. MacCurdy. *The Science Fair Is Easy—If You Let the Students Do It!* February: 25.

Lisonbee, Lorenzo. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 179.

MacCurdy, Robert D. and C. Richard Leacy. *The Science Fair Is Easy—If You Let the Students Do It!* February: 25.

MacCurdy, Robert D. and Paul O'Connell. *Scientific Art.* November: 291.

Maul, Ray C. *The Science Teacher Supply—Another Look.* September: 172.

McCafferty, Robert C. *Comparing Methods of Artificial Respiration.* October: 247.

McKibben, Margaret L. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 143.

Meserve, Robert L. *Why Study Engineering?* April: 130.

Meyer, Agnes E. *Education for a Technological Society.* September: 167.

Milgrom, Harry. *An Electro-Mechanical Television Analogy.* March: 93.

Milgrom, Harry. *Lightning at Your Finger Tip.* September: 189.

Milgrom, Harry. *Water, Water Everywhere—.* November: 293.

Molkenbur, Robert. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 120.

Nelson, Clifford R. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 117.

Novak, Benjamin J. *And as for Industrial Experience.* October: 221.

O'Connell, Paul and Robert D. MacCurdy. *Scientific Art.* November: 291.

Owen, Brewster. *Latent Heat of Evaporation.* April: 153.

Palmer, Nelson P. *It's Easy to Teach the Six Cases of the Convex Lens.* September: 189.

Papich, Michael. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 119.

Paul, J. B. and Leonard Winier. *Student Evaluation of Teaching Procedures in Biology.* April: 123.

Pemberton, Woodrow. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 180.

Volume XXI, THE SCIENCE TEACHER

Index—February through November, 1954

Author's Index

Alfke, Dorothy. *Squeeze Bottle Science.* October: 245.

Anderson, Harold S. *A Key to the Science Interests of Junior High School Students.* October: 227.

Anderson, Kenneth E. *Implications for Teacher Education in Science.* March: 71.

Barish, William. *Grading the Teacher.* September: 182.

Bayles, Ernest E. *Is Modern Science Inductive?* April: 113.

Beachler, Charles A. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 142.

Beck, Charles F. *How to Make a Carbon Microphone Using a Telephone Speaker.* March: 95.

Bingham, N. Eldred and Marjorie Bingham. *The School Assembly as a Science Experience.* March: 81.

Brown, Clyde M. *Reading in Science as a Means of Improving the Junior High School Program.* November: 281.

Brown, Stanley B. *Trends in Science Education—1953.* March: 84.

Buckham, W. Bayard. *Progress in Making Science Real to Everyone.* February: 12.

Buell, Mahlon. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 118.

Burleson, Charles E. *Bring the Sky into the Classroom.* February: 23.

Burnett, R. Will. *Reading and Plugging In—Through Elementary Science.* March: 65.

Chatelier, Paul A. *Hydroponics.* March: 74.

Collette, Alfred T. and Harvey S. Steinberg. *Centigrade-Fahrenheit Conversion Chart . . . A Teacher-Pupil Project.* October: 245.

Fonsworth, Emile C. *The Functional Approach in General Science.* February: 19.

Freeman, P. J. and M. M. Shrewsbury. *Uses of Fresh Anatomical Materials Prepared by Deep Freezing.* February: 31.

Grass, Calvin. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 141.

Hadley, Elbert H. *Leonardo da Vinci—Proponent of the Experimental Method.* October: 217.

Hall, David G. *Recent Developments in Entomology and Their Implications.* October: 224.

Hanawalt, F. A. *Do You Have Ants in Your Plans?* February: 21.

Hasse, M. M. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 180.

Hertzka, Katherine. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 118.

Hollenbeck, Irene. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 140.

Kaempffert, Waldemar. *Can Science Create Life?* November: 265.

King, Jennings. *Thermostat Demonstrator.* March: 93.

Kirk, Raymond E. *Science Teaching and the Laboratory.* October: 238.

Lampkin, Richard H. *A Laboratory Activity in Astronomy.* April: 126.

Larrick, Nancy. *Children's Books Enrich Elementary Science.* October: 231.

Leacy, C. Richard and Robert D. MacCurdy. *The Science Fair Is Easy—If You Let the Students Do It!* February: 25.

Lisonbee, Lorenzo. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 179.

MacCurdy, Robert D. and C. Richard Leacy. *The Science Fair Is Easy—If You Let the Students Do It!* February: 25.

MacCurdy, Robert D. and Paul O'Connell. *Scientific Art.* November: 291.

Maul, Ray C. *The Science Teacher Supply—Another Look.* September: 172.

McCafferty, Robert C. *Comparing Methods of Artificial Respiration.* October: 247.

McKibben, Margaret L. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 143.

Meserve, Robert L. *Why Study Engineering?* April: 130.

Meyer, Agnes E. *Education for a Technological Society.* September: 167.

Milgrom, Harry. *An Electro-Mechanical Television Analogy.* March: 93.

Milgrom, Harry. *Lightning at Your Finger Tip.* September: 189.

Milgrom, Harry. *Water, Water Everywhere—.* November: 293.

Molkenbur, Robert. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 120.

Nelson, Clifford R. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 117.

Novak, Benjamin J. *And as for Industrial Experience.* October: 221.

O'Connell, Paul and Robert D. MacCurdy. *Scientific Art.* November: 291.

Owen, Brewster. *Latent Heat of Evaporation.* April: 153.

Palmer, Nelson P. *It's Easy to Teach the Six Cases of the Convex Lens.* September: 189.

Papich, Michael. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 119.

Paul, J. B. and Leonard Winier. *Student Evaluation of Teaching Procedures in Biology.* April: 123.

Pemberton, Woodrow. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 180.

Postl, Anton. *A General Education Course in the Foundations of Physical Science.* February: 15.
Reichard, Herbert H. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 142.
Richman, T. Lefoy. *Venereal Disease—Down But Not Out.* February: 9.
Roth, John M. *Here's One Way.* September: 191.
Schwabe, Louise A. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 181.
Sears, Paul B. *The Appraisal of Natural Resources.* September: 185.
Shrewsbury, M. M. and P. J. Freeman. *Uses of Fresh Anatomical Materials Prepared by Deep Freezing.* February: 31.
Silverstein, Esther. *Cooperative Activities in Elementary Science.* April: 121.
Simmons, Maitland P. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 141.
Skilken, Jacob M. *Needed—A New Science Curriculum.* October: 233.
Stanley, Robert. *A Tree for Every Student.* April: 153.
Steinberg, Harvey S. and Alfred T. Collette. *Centigrade-Fahrenheit Conversion Chart . . . A Teacher-Pupil Project.* October: 245.
Stollberg, Robert. *Color Television—A Survey for Science Teachers.* March: 57.
Story, Owen B. *First Week of School in Science—A Symposium of Ideas and Experiences.* April: 120.
Stotler, Donald W. *What Should High School Science Do?* March: 68.
Stroud, Dean C. *First Week of School in Science—A Symposium of Ideas and Experiences.* September: 179.
Taylor, Hilda. *A Blue Sky for the Classrooom.* February: 24.
Trout, Verdine E. *Spontaneous Combustion.* February: 32.
Tyson, Robert. *Psychology—Minus the Mystery.* October: 236.
Utberg, Carl, Jr. *Electromagnetism.* February: 31.
Vessel, M. F. *What Holds the Water Up?* March: 79.
Watson, Fletcher G. *Analysis of a Science Talent Search Examination.* November: 274.
Webb, Hanor A. *Curriculum Changes Needed Because of Our Times.* September: 177.
Wilks, William T. *An Inexpensive Demonstration Galvanometer.* February: 32.
Winier, Leonard and J. B. Paul. *Student Evaluation of Teaching Procedures in Biology.* April: 123.
Wolf, Frank E. *A Use for 'Old' Iron Filings.* November: 292.
Woodburn, John H. *Predicting High School Science Enrollments for 1958 and 1968.* April: 133.
Woodburn, John H. *Science Teachers Explore Research.* November: 269.
Young, J. Ross. *First Week of School in Science—Symposium of Ideas and Experiences.* April: 119.
Yulish, Charles. *A Student Report—Exploring and Developing a Science Interest.* November: 277.

Topical Index

Conservation and Gardening

A Tree for Every Student. Robert Stanley. April: 153.
Hydroponics. Paul A. Chatelier. March: 74.
Recent Developments in Entomology and Their Implications. David G. Hall. October: 224.
The Appraisal of Natural Resources. Paul B. Sears. September: 185.

Education of Science Teachers

And as for Industrial Experience. Benjamin J. Novak. October: 221.
Cooperative Activities in Elementary Science. Esther Silverstein. April: 121.
Here's One Way. John M. Roth. September: 191.
Implications for Teacher Education in Science. Kenneth E. Anderson. March: 71.
Science Teachers Explore Research. John H. Woodburn. November: 269.

Elementary School Science

A Blue Sky for the Classroom. Hilda Taylor. February: 24.
Bring the Sky into the Classroom. Charles E. Burleson. February: 23.
Children's Books Enrich Elementary Science. Nancy Larrick. October: 231.
Cooperative Activities in Elementary Science. Esther Silverstein. April: 121.
Curriculum Changes Needed Because of Our Times. Hanor A. Webb. September: 177.
Electromagnetism. Carl Utberg, Jr. February: 31.
Lightning at Your Finger Tip. Harry Milgrom. September: 189.
Reading and Plugging In—Through Elementary Science. R. Will Burnett. March: 65.
The School Assembly as a Science Experience. N. Eldred Bingham and Marjorie Bingham. March: 81.
Water, Water Everywhere—. Harry Milgrom. November: 293.

Experiments, Demonstrations, and Pupil Projects and Activities

A Blue Sky for the Classroom. Hilda Taylor. February: 24.
A Laboratory Activity in Astronomy. Richard H. Lampkin. April: 126.
A Student Report—Exploring and Developing a Science Interest. Charles Yulish. November: 277.
A Tree for Every Student. Robert Stanley. April: 153.

A Use for 'Old' Iron Filings. Frank E. Wolf. November: 292.
An Electro-Mechanical Television Analogy. Harry Milgrom. March: 93.
An Inexpensive Demonstration Galvanometer. William T. Wilks. February: 32.
Bring the Sky into the Classroom. Charles E. Burleson. February: 23.
Centigrade-Fahrenheit Conversion Chart . . . A Teacher-Pupil Project. Alfred T. Collette and Harvey S. Steinberg. October: 245.
Comparing Methods of Artificial Respiration. Robert C. McCafferty. October: 247.
Cooperative Activities in Elementary Science. Esther Silverstein. April: 121.
Do You Have Ants in Your Plans? F. A. Hanawalt. February: 21.
Electromagnetism. Carl Utberg, Jr. February: 31.
How to Make a Carbon Microphone Using a Telephone Speaker. Charles F. Beck. March: 95.
Hydroponics. Paul A. Chatelier. March: 74.
It's Easy to Teach the Six Cases of the Convex Lens. Nelson P. Palmer. September: 189.
Latent Heat of Evaporation. Brewster Owen. April: 153.
Lightning at Your Finger Tip. Harry Milgrom. September: 189.
Scientific Art. Robert D. MacCurdy and Paul O'Connell. November: 291.
Spontaneous Combustion. Verline E. Trout. February: 32.
Squeeze Bottle Science. Dorothy Alfke. October: 245.
The School Assembly as a Science Experience. N. Eldred Bingham and Marjorie Bingham. March: 81.
The Science Fair Is Easy—If You Let the Students Do It! Robert D. MacCurdy and C. Richard Leacy. February: 25.
Thermostat Demonstrator. Jennings King. March: 93.
Uses of Fresh Anatomical Materials Prepared by Deep Freezing. P. J. Freeman and M. M. Shrewsbury. February: 31.
Water, Water Everywhere—. Harry Milgrom. November: 293.
What Holds the Water Up? M. F. Vessel. March: 79.

FSA Activities

"Encouraging Future Scientists: Available Materials and Services." February: 41.
Program for 1954. October: 251.
Recognition Awards for Science Teachers. February: 41. March: 91. April: 151. September: 201. November: 299.
Science Achievement Awards for Students. February: 41. March: 91. April: 151. September: 197. November: 299.
Science Teaching as a Career. February: 41.
Student Chart Making Contest. February: 41. April: 151. November: 299.
Summer Work for Science Teachers. February: 41. March: 91. April: 152. October: 251.
The School Science Laboratory. February: 41. March: 91.
West Coast Conference. April: 151. November: 269.
Winners in Student Chart Making Contest, 1954. September: 204.
Winners of Recognition Awards for Science Teachers, 1954. September: 201.
Winners of Science Achievement Awards for Students, 1954. September: 197.

History, Philosophy, Goals, and Objectives

A General Education Course in the Foundations of Physical Science. Anton Postl. February: 15.
Education for a Technological Society. Agnes E. Meyer. September: 167.
Implications for Teacher Education in Science. Kenneth E. Anderson. March: 71.
Is Modern Science Inductive? Ernest E. Bayles. April: 113.
Progress in Making Science Real to Everyone. W. Bayard Buckham. February: 12.
Reading and Plugging In—Through Elementary Science. R. Will Burnett. March: 65.
Science Teaching and the Laboratory. Raymond E. Kirk. October: 238.
Trends in Science Education—1953. Stanley B. Brown. March: 84.
What Should High School Science Do? Donald W. Stotler. March: 68.

Information for Science Teachers

A Student Report—Exploring and Developing a Science Interest. Charles Yulish. November: 277.
Can Science Create Life? Waldemar Kaempffert. November: 265.
Children's Books Enrich Elementary Science. Nancy Larrick. October: 231.
Color Television—A Survey for Science Teachers. Robert Stollberg. March: 57.
Leonardo da Vinci—Proponent of the Experimental Method. Elbert H. Hadley. October: 217.
Psychology—Minus the Mystery. Robert Tyson. October: 236.
Recent Developments in Entomology and Their Implications. David G. Hall. October: 224.
"School Facilities for Science Instruction". April: 109.
Science Education 1954 . . . A Directory of Summer Workshops and Programs of Study. April: 135.
Science Teachers Explore Research. John H. Woodburn. November: 269.
"Selected Science Teaching Ideas of 1952". February: 3.
Study Opportunities for Science Teachers. February: 18.
The Appraisal of Natural Resources. Paul B. Sears. September: 185.
Venereal Disease—Down, But Not Out. T. Lefoy Richman. February: 9.
Why Study Engineering? Robert L. Meserve. April: 130.

Instructional Suggestions, Methods, and Materials

A Blue Sky for the Classroom. Hilda Taylor. February: 24.
A Laboratory Activity in Astronomy. Richard H. Lampkin. April: 126.
A Tree for Every Student. Robert Stanley. April: 153.

A Use for 'Old' Iron Filings. Frank E. Wolf. November: 292.
An Electro-Mechanical Television Analogy. Harry Milgrom. March: 92.
An Inexpensive Demonstration Galvanometer. William T. Wilks. February: 32.
Bring the Sky into the Classroom. Charles E. Burleson. February: 23.
Centigrade-Fahrenheit Conversion Chart . . . A Teacher-Pupil Project. Alfred T. Collette and Harvey S. Steinberg. October: 245.
Comparing Methods of Artificial Respiration. Robert C. McCafferty. October: 247.
Do You Have Ants in Your Plans? F. A. Hanawalt. February: 21.
Electromagnetism. Carl Utberg, Jr. February: 31.
First Week of School in Science—A Symposium of Ideas and Experiences. Charles A. Beachler, Mahlon Buell, Calvin Grass, Katherine Hertzka, Irene Hollenbeck, Margaret J. McKibben, Robert Molkenbur, Clifford R. Nelson, Michael Papich, Herbert H. Reichard, Maitland P. Simmons, Owen B. Story, J. Ross Young. April: 117. M. M. Hasse, Lorenzo Lisonbee, Woodrow Pemberton, Louise A. Schwabe, Dean C. Stroud. September: 179.
Here's One Way. John M. Roth. September: 191.
How to Make a Carbon Microphone Using a Telephone Speaker. Charles F. Beck. March: 95.
Hydroponics. Paul A. Chatelier. March: 74.
It's Easy to Teach the Six Cases of the Convex Lens. Nelson P. Palmer. September: 189.
Latent Heat of Evaporation. Brewster Owen. April: 153.
Lightning at Your Finger Tip. Harry Milgrom. September: 189.
Reading in Science as a Means of Improving the Junior High School Program. Clyde M. Brown. November: 281.
Scientific Art. Robert D. MacCurdy and Paul O'Connell. November: 291.
Spontaneous Combustion. Verdine E. Trout. February: 32.
Squeeze Bottle Science. Dorothy Alfke. October: 245.
The Functional Approach in General Science. Emile C. Fonsworth. February: 19.
The School Assembly as a Science Experience. N. Eldred and Marjorie Bingham. March: 81.
Thermostat Demonstrator. Jennings King. March: 93.
Uses of Fresh Anatomical Materials Prepared by Deep Freezing. P. J. Freeman and M. M. Shrewsbury. February: 31.
Water, Water Everywhere—. Harry Milgrom. November: 293.
What Holds the Water Up? M. F. Vessel. March: 79.

Investigations, Research, and Fact-finding Studies

A Key to the Science Interests of Junior High School Students. Harold S. Anderson. October: 227.
Analysis of a Science Talent Search Examination. Fletcher G. Watson. November: 274.
Predicting High School Science Enrollments for 1958 and 1968. John H. Woodburn. April: 133.
The Science Teacher Supply—Another Look. Ray C. Maul. September: 172.

NSTA Activities

Berkeley Meeting. October: 249. November: 295.
Board Actions, New York City Meeting. September: 195.
Board of Directors for 1954-55. April: 147.
Boston Meeting. February: 35.
Lake Texoma Regional Conference. September: 193.
Life Members. February: 39. October: 250.
National Convention, 1954—Chicago. February: 35, 37. March: 76.
National Convention, 1955—Cincinnati. October: 249.
New York City Conference. April: 147.
Nomination Committee Invites Suggestions. September: 195.
Nomination Committee Report. March: 89.
Nominees for Officers and Directors for 1954-55. March: 86.
NSTA Cooperates With Educational Testing Service. October: 250.
NSTA Meetings—Past and Future. September: 194.
Obourn Goes to UNESCO. March: 89.
Workshop on Community Science Resources. April: 147.

Science Clubs, Fairs, Exhibits; Science Talent Searches

Analysis of a Science Talent Search Examination. Fletcher G. Watson. November: 274.
Scientific Art. Robert D. MacCurdy and Paul O'Connell. November: 291.
The Science Fair Is Easy—If You Let the Students Do It! Robert D. MacCurdy and C. Richard Leacy. February: 25.

Selection and Organization of Course Content

A General Education Course in the Foundations of Physical Science. Anton Postl. February: 15.
A Key to the Science Interests of Junior High School Students. Harold S. Anderson. October: 227.
Curriculum Changes Needed Because of Our Times. Hanor A. Webb. September: 177.
Grading the Teacher. William Barish. September: 182.
Needed—A New Science Curriculum. Jacob M. Skilken. October: 233.
Progress in Making Science Real to Everyone. W. Bayard Buckham. February: 12.
Reading in Science as a Means of Improving the Junior High School Program. Clyde M. Brown. November: 281.
The Functional Approach in General Science. Emile C. Fonsworth. February: 19.

Tests and Evaluation of Outcomes

Grading the Teacher. William Barish. September: 182.
Student Evaluation of Teaching Procedures in Biology. Leonard Winier and J. B. Paul. April: 123.